

Work Order ID 77517***77517***

Monday, December 12, 2011 1:12:50 PM

Ship Dec 23rd or 500mtr

Item ID: DSI 9517-011

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Alternate Wearplate Installation

Stop

NS2

Start Date: 12/12/2011 Start Qty: 2.00

2

Cust Item ID:

Required Date: 12/16/2011 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: MFDate: 11-12-12 Tooling:

Date:

Run Start

NR1

QC: _____

Date: _____ SPC (Y/N): _____

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
DSI 9517	B								

100

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP DSI9517-011 CHG002

S 11/21/21

H for MLT 11-12-19 (2)

110

0.00

110

Pick Kit

Packaging

Memo

0.00

Packaging

11/12/20 S 11/21/21 (2)

120

0.00

120

QC4- 100% Inspect kits for completeness

QC

Memo

0.00

Quality Control

S 11/21/21

(72)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 77517***77517***

Page 2

Monday, December 12, 2011 1:12:50 PM

Item ID: DSI 9517-011

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Alternate Wearplate Installation

Stop ***NS2***

Start Date: 12/12/2011 Start Qty: 2.00

2

Cust Item ID:

Required Date: 12/16/2011 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP DSI 9517-011 Location: _____								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

11/12/21 (2)

11/12/21

MF
11-12-21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Monday, December 12, 2011 1:12:49 PM

Page 1

Work Order ID: 77517

Parent Item: DSI 9517-011

Parent Item Name: Alternate Wearplate Installation

Start Date: 12/12/2011

Required Date: 12/16/2011

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A new issue DD 10.04.26 verified by:EC
DD verified by:EC

IPP Rev:B 11.11.01 as per chg002

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
S ₊ AN4C53A Bolt		Purchased	No			110	Each	57.0000	4	8			
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				ST361		57							
				119558		5							
				119562		10							
				119688		22							
				119861		20							
S ₊ D3403-5 Bushing		Manufactured	No			110	Each	20.0000	8	16			
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				FG052		12							
				74761		12							
				ST052		8							
				66530		8							
S ₊ D4095-041 Wearplate Assembly		Manufactured	No			110	Each	0.0000	1				
S ₊ D4095-043 Wearplate Assembly		Manufactured	No			110	Each	0.0000	1				

B77503

B76534

B76535 11/12/2011

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-742 REV. D
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D412-742 REV. 3

REF. CANADIAN STC: SH05-37
REF. FAA STC: SR01583SE
REF. EASA STC: EASA.IM.R.S.01126

REFERENCE ONLY

PURPOSE:

The purpose of this service instruction is to introduce an alternate wearplate installation for the D412-742-011/-013 Skidtube Installations at CHG 006 or earlier. D412-742-011/-013 at CHG 007 or later have incorporated the new Wearplate kit. The new DSI-9517-011 Wearplate Kit consists of new wearplates destined to replace existing D3564-1/-3 Wearshoes and eliminates the need for D3566-1/-3 Gaskets. The components in the DSI-9517-011 Wearplate Kit are as defined in the parts list on sheet 4 of this service instruction.

INSTALLATION PROCEDURE:

Replace D3564-1/-3 Wearshoes and D3566-1/-3 Gaskets with D4095-041/-043 Wearplates Assemblies as follows:

1. Remove existing D3564-1/-3 Wearshoes and D3566-1/-3 Gaskets per Item 32.6.1 of ICA-D412-742. It might be necessary to loosen the aft end of D3564-5 Wearshoe and D3566-5 Gasket.
2. Remove qty.(4) AN4C52A Bolts, D3403-1 Bushings, and qty.(8) D3672-11 Washers as indicated in Figures 1 and 2 of this service instruction.
3. Inspect the skidtube and saddles per Chapter 5 of ICA-D412-742.
4. Seal existing inserts located on both sides of the skidtube in area shown in Figures 1 and 2 of this service instruction using Sikaflex -241/-291 or Proseal 890 or MIL-S-8802 Class 2B sealant.
5. Locate the DSI-9517-011 Wearplate Kit as shown in Figure 1 and 2 of this service instruction.
6. Transfer drill qty.(2) Ø0.438 hole from the skidtube/saddle to the D4095-041/-043 Wearplates Assemblies. Deburr. Touch up finish per Item 5.2.14 of ICA-D412-742 as required.
7. Install the DSI-9517-011 Wearplate Kit using the same AN3C hardware as shown in ICA-D412-742. Torque to 15-25 in-lbs (1.7-2.8 N-m).
8. Install D3403-5 Bushings and AN4C53A Bolts in lieu of D3403-1 Bushings and AN4C52A Bolts removed at step 2 above. Ensure that the nuts on the AN4C Bolts are on the inboard side of the skidtube. Torque to 50-70 in-lbs (5.7-7.9 N-m).
9. Amend weight and balance per the Weight and Balance Table below.

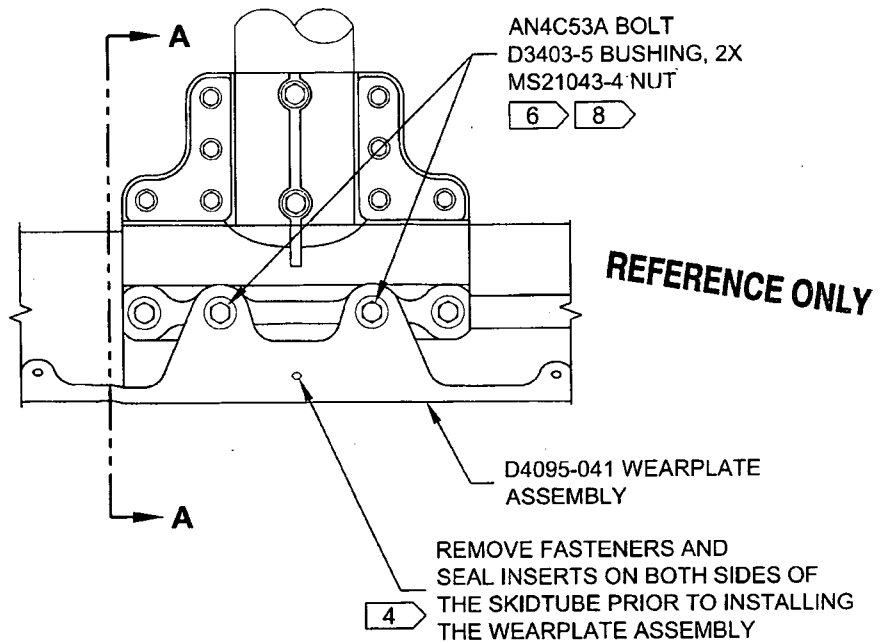
WEIGHT AND BALANCE:

Use the following weight and balance information for DART D412-742-011/-013 skidtube and saddle installations equipped with DSI-9517-011 Wearplate Kit.

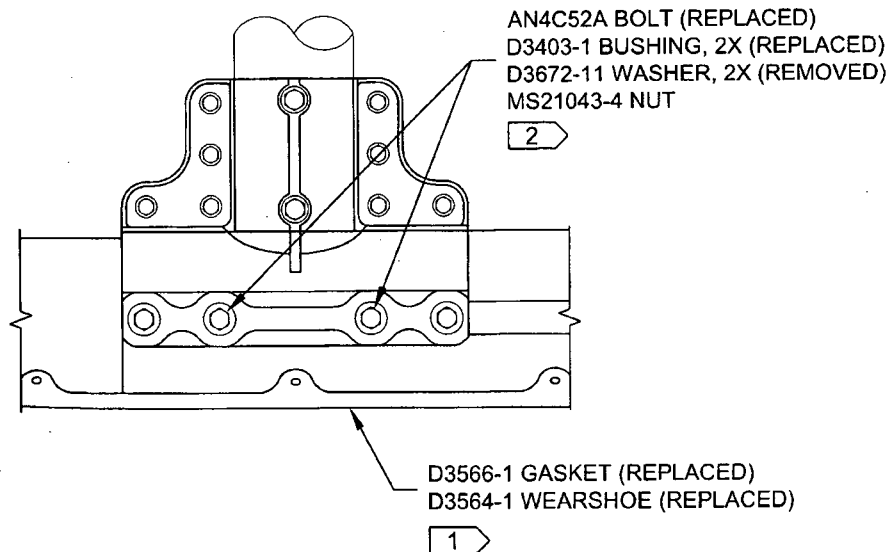
INSTALLATION	WEIGHT	LATERAL		LONGITUDINAL	
		ARM	MOMENT	ARM	MOMENT
D412-742-011 Float Skidtube Installation at CHG 007, or earlier CHG # with DSI-9517-011 kit installed	70.0 lb 31.8 kg	±55.0 in ±1.40 m	±3850 in-lb ±44.5 m-k-g	130 in 3.3 m	9100 in-lb 105 m-k-g
D412-742-013 Float Skidtube Installation at CHG 007, or earlier CHG # with DSI-9517-011 kit installed	70.0 lb 31.8 kg	±55.0 in ±1.40 m	±3850 in-lb ±44.5 m-k-g	130 in 3.3 m	9100 in-lb 105 m-k-g

B	ITEM 21B AND 22B REMOVED FROM PARTS LIST	XDF	11.10.11
A	NEW ISSUE	MB	10.04.21
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE USA, INC KENT, WA	
DRAWN	XDF		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9517	SHEET 1 OF 6
APPROVED		TITLE	SCALE
DE APPR.		ALTERNATE WEARPLATE KIT	NTS
DATE	11.10.11	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

IS:



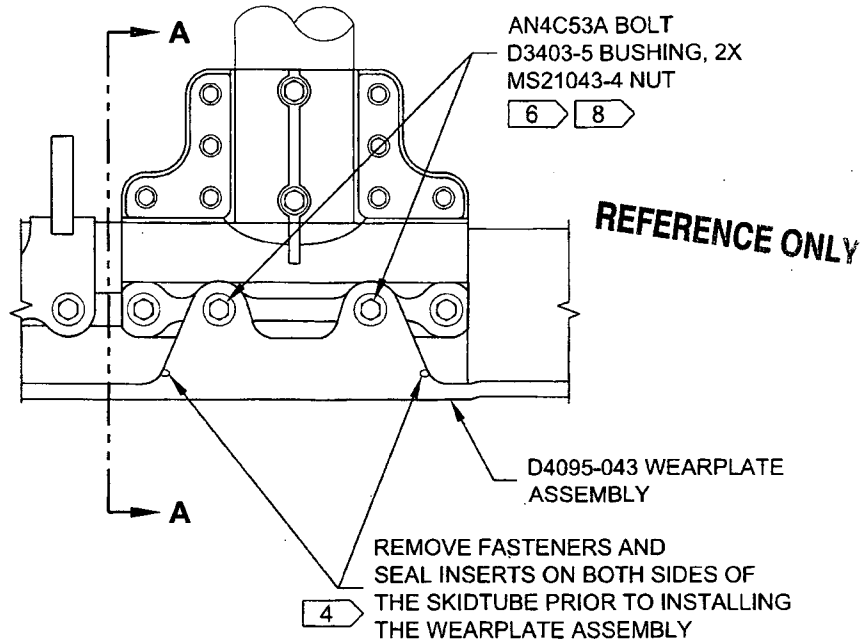
WAS:



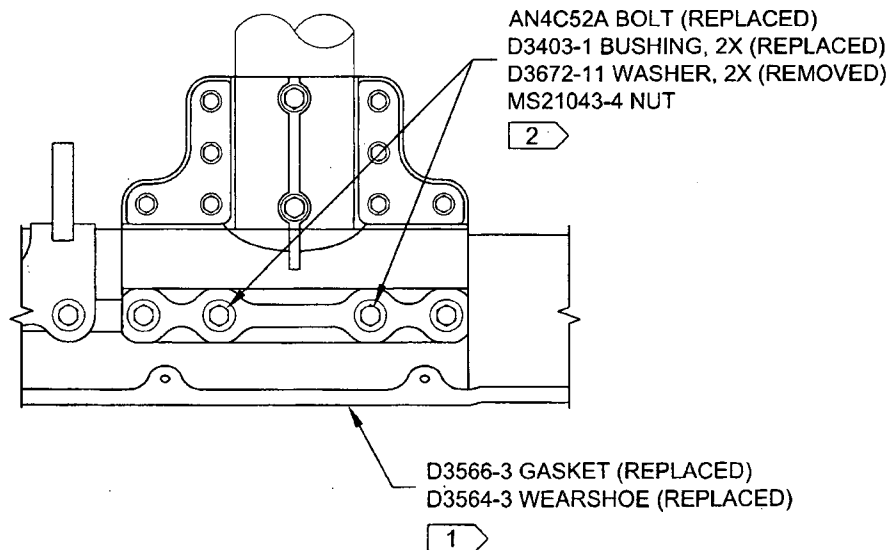
**FIGURE 1: CHANGE AT FORWARD SADDLE LOCATION
WITH DSI-9517-011 KIT INSTALLED**

DESIGN	<i>[Signature]</i>	DART AEROSPACE USA, INC	
DRAWN	XDF	KENT, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9517	SHEET 2 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	ALTERNATE WEARPLATE KIT	NTS
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IS:

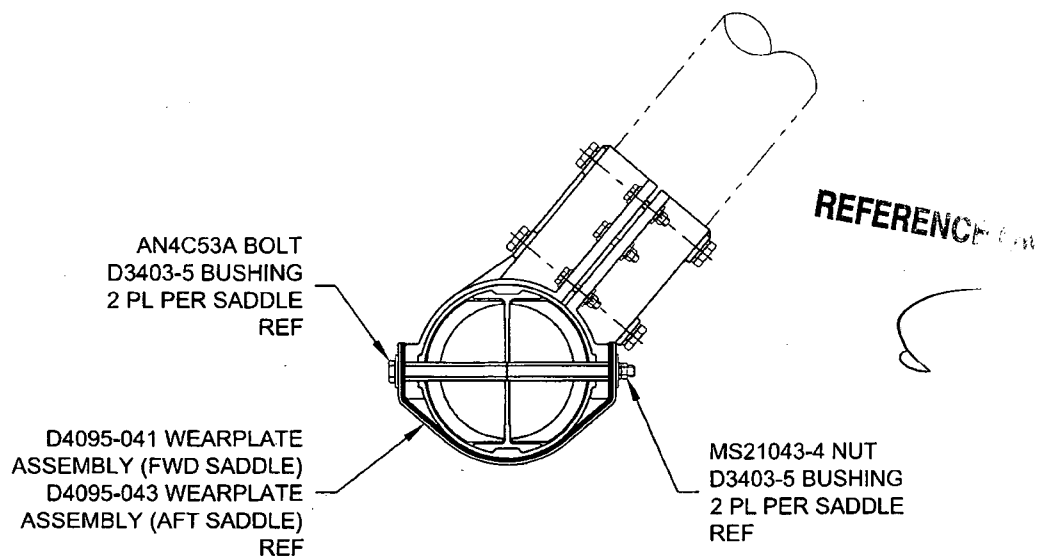


WAS:



**FIGURE 2: CHANGE AT AFT SADDLE LOCATION
WITH DSI-9517-011 KIT INSTALLED**

DESIGN	<i>[Signature]</i>	DART AEROSPACE USA, INC	
DRAWN	XDF	KENT, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9517	SHEET 3 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	ALTERNATE WEARPLATE KIT	NTS
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SECTION A-A

DSI-9517-011 PARTS LIST:

QTY -011	PART NUMBER	DESCRIPTION
X	DSI-9517-011	WEARPLATE KIT
8	D3403-5	BUSHING
1	D4095-041	WEARPLATE ASSEMBLY
1	D4095-043	WEARPLATE ASSEMBLY
4	AN4C53A	BOLT

DESIGN		DART AEROSPACE USA, INC	
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CHECKED		DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9517	SHEET 4 OF 6
APPROVED		TITLE	SCALE
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THE PARTS LISTS IN SECTION 32.15 OF ICA-D412-742 (PAGES 53 AND 55) AND SECTION 5.1 OF IIN-D412-742 (PAGES 16 AND 17) ARE AMENDED AS FOLLOWS WHEN OPTIONAL DSI-9517-011 KIT IS INSTALLED:

32.15 D412-742-011 (PMA/OEM) FLOAT SKIDTUBE INSTALLATION PARTS LIST (ICA-D412-742)
5.1 D412-742-011 (PMA/OEM) FLOAT SKIDTUBE INSTALLATION PARTS LIST (IIN-D412-742)

Item	QTY -011	QTY -041	QTY -015	PART NUMBER	DESCRIPTION
	X			D412-742-011	FLOAT SKIDTUBE INSTALLATION
	1	X		D412-742-041	FLOAT SKIDTUBE
	1		X	D412-742-015	ELECTRIC STEP KIT

IS:

3		10		AN3C6A	BOLT (REMOVED QTY.2)
4		4		AN3C7A	BOLT (REMOVED QTY.4)
5		38		AN960C10L	WASHER (REMOVED QTY.6)
21A		1		D4095-041	WEARPLATE ASSEMBLY
22A		1		D4095-043	WEARPLATE ASSEMBLY
46	8			D3403-1	BUSHING (REPLACED QTY.4 WITH D3403-5)
46A	8			D3403-5	BUSHING (REPLACES QTY.4 D3403-1)
49	4			AN4C52A	BOLT (REPLACED QTY.4 WITH AN4C53A)
49A	4			AN4C53A	BOLT (REPLACES QTY.4 AN4C52A)
53	8			D3672-11	WASHER (REMOVED QTY.8)

WAS:

3		12		AN3C6A	BOLT
4		8		AN3C7A	BOLT
5		44		AN960C10L	WASHER
21A		1		D3564-1	WEARPLATE
21B		1		D3564-3	WEARPLATE
22A		1		D3566-1	GASKET
22B		1		D3566-3	GASKET
46	16			D3403-1	BUSHING
49	8			AN4C52A	BOLT
53	16			D3672-11	WASHER

DESIGN	<i>J</i>	DART AEROSPACE USA, INC	
DRAWN	XDF	KENT, WA	
CHECKED	<i>J</i>	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9517	SHEET 5 OF 6
APPROVED	<i>MP</i>	TITLE	SCALE
DE APPR.	<i>TH</i>	ALTERNATE WEARPLATE KIT	NTS
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THE PARTS LISTS IN SECTION 32.16 OF ICA-D412-742 (PAGES 57 AND 59) AND SECTION 5.2 OF IIN-D412-742 (PAGES 18 AND 19) ARE AMENDED AS FOLLOWS WHEN OPTIONAL DSI-9517-011 KIT IS INSTALLED:

32.16 D412-742-013 (APICAL TRI-BAG) FLOAT SKIDTUBE INSTALLATION PARTS LIST (ICA-D412-742)
5.2 D412-742-013 (APICAL TRI-BAG) FLOAT SKIDTUBE INSTALLATION PARTS LIST (IIN-D412-742)

Item	QTY -013	QTY -043	PART NUMBER	DESCRIPTION
	X		D412-742-013	FLOAT SKIDTUBE INSTALLATION
	1	X	D412-742-043	FLOAT SKIDTUBE

IS:

3		10	AN3C6A	BOLT (REMOVED QTY.2)
4		4	AN3C7A	BOLT (REMOVED QTY.4)
5		38	AN960C10L	WASHER (REMOVED QTY.6)
21A	1		D4095-041	WEARPLATE ASSEMBLY
22A	1		D4095-043	WEARPLATE ASSEMBLY
46	8		D3403-1	BUSHING (REPLACED QTY.4 WITH D3403-5)
46A	8		D3403-5	BUSHING (REPLACES QTY.4 D3403-1)
49	4		AN4C52A	BOLT (REPLACED QTY.4 WITH AN4C53A)
49A	4		AN4C53A	BOLT (REPLACES QTY.4 AN4C52A)
53	8		D3672-11	WASHER (REMOVED QTY.8)

WAS:

3		12	AN3C6A	BOLT
4		8	AN3C7A	BOLT
5		44	AN960C10L	WASHER
21A		1	D3564-1	WEARPLATE
21B		1	D3564-3	WEARPLATE
22A		1	D3566-1	GASKET
22B		1	D3566-3	GASKET
46	16		D3403-1	BUSHING
49	8		AN4C52A	BOLT
53	16		D3672-11	WASHER

DESIGN	<i>[Signature]</i>	DART AEROSPACE USA, INC	
DRAWN	XDF	KENT, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9517	SHEET 6 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	ALTERNATE WEARPLATE KIT NTS	
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